

means for emitting radiation from a first side of the vehicle path;

means for reflecting radiation emitted from said radiation emitting step at a second, opposite side of the vehicle path back towards the first side of the vehicle path;

means for receiving at the first side of the vehicle path the reflected radiation from the reflecting step;

means for detecting a presence or absence of the reflected radiation; and

means for calculating at least one of the speed and acceleration of the vehicle in response to the detecting step;

wherein each of said emitting means comprises means for modulating radiation to emit a modulated beam.

REMARKS

STATUS OF CLAIMS

Claims 2-4, 6-18 and 21-27 are pending in the application. Claims 13 and 22 have been amended to be in independent form as originally filed with minor amendments to overcome rejection made under 35 U.S.C. §112. These amendments were only made to clarify the claimed invention and do not narrow the scope of the claim.

Independent claims 16 and 26 have been amended to include the feature of providing a modulated beam, and claims 1 and 19 have been cancelled without prejudice or disclaimer.

Dependent claims 2, 3, 12, 15, 21, 24 and 25 are amended so that they do not depend on cancelled claims. None of these amendment are made for patentability reason,

but only to place the claims in proper dependencies. The amendments do not narrow the scope of the claims.

Dependent claims 17 and 18 are amended solely to obviate rejections made under 35 U.S.C. §112. The amendments do not narrow the scope of the claims.

OFFICE ACTION

In the outstanding Office Action there is an objection to the drawings. Submitted herewith are amendments to the drawings and specification obviating the objection. Therefore, reconsideration and withdrawal of the objection to the drawings are respectfully requested.

Claims 1-4, 6-15, 19-and 21-27 were rejected under 35 U.S.C. §112, first paragraph. The claims have been carefully reviewed and amended to obviate this rejection. Therefore, reconsideration and withdrawal of the rejection are respectfully requested.

Claim 16 was rejected under 35 U.S.C. §102(b) as being anticipated by McConnell et al. (U.S. Patent No. 5,910,929). Reconsideration and withdrawal of the rejection are respectfully requested. Claim 16 has been amended to include a means for modulating radiation to emit a modulated beam. It is admitted in the outstanding Office Action that McConnell et al. fails to disclose a radiation source that emits a modulated beam. Therefore, reconsideration and withdrawal of the rejection is respectfully requested.

Claims 1-4, 6-11, 17-19, 24 and 26 were rejected under 35 U.S.C. §103 as being unpatentable over McConnell et al. Reconsideration and withdrawal of the rejection are respectfully requested.

Independent claims 1, 16, 19 and 26 include the feature of a modulated beam. It is admitted in the outstanding Office Action that McConnell et al. fails to disclose a modulated beam. Therefore, reconsideration and withdrawal of the rejection are respectfully requested.

Claims 12-15, 21-23, 25 and 27 were rejected under 35 U.S.C. §103(a) as being unpatentable over McConnell et al. in view of Johnson et al. (U.S. Patent No. 5,812,249). Reconsideration and withdrawal of the rejection are respectfully requested.

The combination of McConnell et al. and Johnson et al. fails to teach or suggest either in combination or alone a modulated beam as recited in independent claims 13, 16, 22 or 26.

It is admitted in the outstanding Office Action that McConnell et al. does not disclose a radiation source that produces a modulated beam. However, it is argued that Johnson et al. discloses a radiation source that produces a modulated beam.

Johnson et al. fails to teach or suggest the radiation source that produces a modulated beam as recited in each of the independent claims 13, 16, 22 and 26 of the present application. One advantage of using modulated beams is that it will minimized reflective noise, and thereby provide improved performance (see page 13, fourth paragraph of the present specification).

Johnson et al. teaches away from using modulated beams. It is stated in column 2, lines 59-60 of Johnson et al., that the modulation and beam widths can cause inaccuracies that are not tolerable. Therefore, Johnson et al. teaches to use non-modulated laser beams (see column 1, lines 56-59 of Johnson et al.).

Thus, McConnell et al in combination with Johnson et al. not only fails to teach or suggest the radiation source that produces a modulated beam as recited in each of the independent claims of the present application, but Johnson et al. teaches away from having modulated beam widths as recited in the independent claims.

In light of the foregoing withdrawal of the rejection of the claims under 35 U.S.C. §103 is respectfully requested.

It is respectfully submitted that the application is now in condition for allowance. If it is believed that the application is not in condition for allowance, the Examiner is invited to contact the undersigned Attorney if it is believed that such contact will expedite the prosecution of the application.

In the event that this paper is not timely filed, Applicants petition for an appropriate extension of time. Please charge any fee deficiencies or credit any overpayments to Deposit Account No. 50-2036.

Respectfully submitted,

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Attachments:

Petition for Two-Month Extension of Time
Appendix
Request for Approval of Drawing Corrections
w/FIGS. 2, 4, 5 and 6 marked in red.

Date: February 5, 2003

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